

## **EAR LAVAGE FOR IMPROVED EFFICACY OF THERAPY FOR RECURRENT OTITIS EXTERNA IN DOGS**

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**Abstract Body** Any inflammatory condition of the external ear canal is described as otitis externa. The response of the external ear canal to chronic inflammation leads to changes in the microenvironment of the ear canal. The objective of this study is to describe a more effective method to minimize the use of topical and systemic antibiotics and steroids in cases of recurrent otitis externa.

During January to August 2006, 29 cases of recurrent otitis externa presented to the Veterinary Teaching Hospital, University of Peradeniya were included in this study. All the animals were treated previously with systemic and topical antibiotics for more than 6 months without apparent clinical improvement. In 80% of the instances long acting antibiotic suspensions and antiparasitic sprays were used in the ear canal leaving a crust like residue.

All 29 cases were subjected to ear canal lavage under general anesthesia. Debris was carefully removed prior to lavage. Luke warm physiologic saline was the initial cleaning solution used. Flushing and evacuation of solution was done under direct visualization through an otoscope. A tom cat catheter or a stiff catheter was used for the flushing and evacuation together with a 10 ml plastic syringe. After observing the tympanum and if it is intact ceruminolytic agent ('Oti clear' - lactic acid, salicylic acid) was placed for few minutes. The ear canal was then flushed with warm saline to remove the solution and evacuated. Drying agents were not used.

Owners were advised to use a steroid eardrop (hydrocortisone or dexamethasone) for 1 week to minimize inflammation. Systemic steroid therapy was used where extensive inflammation was encountered (prednisolone 1mg/Kg). According to cytologic examination and culture susceptibility tests, antibiotics and ectoparasiticides (Ivermectin 200 micro g/Kg) was administered. Twenty three animals (79 %) were completely cured after a single lavage and 5 animals (6.3%) required a second lavage before complete clinical cure. Only one dog (3.8%) showed recurrent incidence of the infection but had partially occluded ear canals, which prevented the process of proper lavage. They were subjected to lateral ear canal resection on a later stage.

Ear lavage facilitates the removal of material that predisposes for secondary infections and stimuli for inflammation; allow the complete visualization of tympanum, facilitate the topical medicine to contact all portions of ear canal and removes the material, which reduced the efficacy of topical therapy. It is advisable to perform lavage at an early stage to minimize progression of the condition, which prevent suffering of the animal and reduce the cost of treatment.